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Abstract:

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Each golfer (1-3) on a golf range (4) has an individual display (12-14) showing at least a predicted outcome of each of his/her shots, and a launch-analyser (6-8) to measure velocity vectors of the ball and/or club at strike for central-computation (9) of the prediction. Vibration and piezo-cable sensors (54,55;68,69) at instrumented targets (5;41-45,47) distributed throughout the range (4), detect the presence of balls arriving in their respective locations for matching with launched balls using the computed predictions and probability; active or passive radio-frequency identification and location of balls may also be used. Where a match is found, error between predicted and actual outcome is applied to adaptive correction of the prediction-computing process, and the actual outcome is displayed to the golfer instead of the prediction. Ball and/or club velocity vectors, and ball spin, at launch are measured from light changes occurring in detection planes (96,97;105;114-117;134;144-146) defined by slit apertures (94,95;104), and resulting from retro-reflection from ball (91;110;131) and/or club (130).